

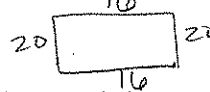
Problem Solving - Area and Perimeter

Name Key

1. The perimeter of a rectangle is 72 m. The width of the rectangle is 16 m.

What is the area of the rectangle?

$$20 \times 16 = 320 \text{ m}^2$$



$$\begin{aligned} 72 &= 32 + x \\ -32 & \\ \hline 40 &= x \div 2 = 20 \end{aligned}$$

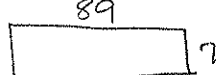
2. The length of a rectangular rug is 5 feet. If the area is 15 square feet, what is the perimeter of the rug?



$$10 + 6 = 16 \text{ ft.}$$

3. The length of a swimming pool is 89 feet. If the area is 6,319 sq. feet, what is the perimeter of the pool?

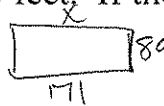
$$(89 + 71) \times 2 = 320 \text{ ft.}$$



$$6319 \div 89 = 71$$

4. The perimeter of a rectangular swimming pool is 320 feet. If the width of the pool is 89 feet, what is the length of the pool?

$$71 \text{ ft.}$$



$$320 = (89 \times 2) + 2x$$

$$178 + 2x$$

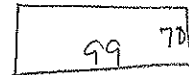
$$142 = 2x$$

$$71 = x$$

5. The lengths of a hexagon are 8cm, 13cm, 18cm, 10cm, and 3cm. If the perimeter of the object is 62 cm, what is the length of the unknown side?

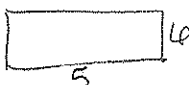
$$62 - 52 = 10 \text{ cm}$$

6. The area of a swimming pool is 6,930 sq. feet. If the width of the pool is 99 ft., what is the length of the pool?



$$6930 \div 99 = 70 \text{ ft.}$$

7. The width of a rectangular rug is 6 ft. If the perimeter is 22 feet, what is the area of the rug?

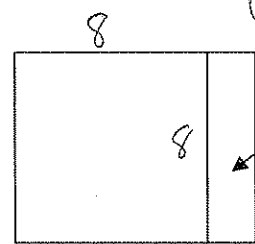


$$22 - 12 = 10 \div 2 = 5$$

$$6 \times 5 = 30 \text{ ft}^2$$

8. The diagram below represents a bird's eye view of Jan's square yard. Where the yard ends, a rectangular walkway begins. If the area of the yard is 64 sq. feet, and the walkway is 2 feet-wide, what is the area of the walkway?

$$\begin{aligned} 64 &= s^2 \\ 8 &= s \end{aligned}$$



2 ft.

walkway

$$8 \times 2 = 16 \text{ ft}^2$$